Complete Summary

GUIDELINE TITLE

Abdominal aortic aneurysm (AAA) screening clinical practice guideline.

BIBLIOGRAPHIC SOURCE(S)

Kaiser Permanente Care Management Institute. Abdominal aortic aneurysm (AAA) screening clinical practice guideline. Oakland (CA): Kaiser Permanente Care Management Institute; 2009 Apr. 37 p. [29 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Abdominal aortic aneurysm

GUIDELINE CATEGORY

Prevention Screening

DISCLAIMER

CLINICAL SPECIALTY

Cardiology Family Practice Geriatrics Internal Medicine
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses Allied Health Personnel Managed Care Organizations Nurses Physician Assistants Physicians

GUIDELINE OBJECTIVE(S)

To assist physicians, administrators, and other health care professionals from Kaiser Permanente in determining the most effective screening practices for abdominal aortic aneurysm

TARGET POPULATION

Asymptomatic adults aged 18 and older with and without a positive family history of abdominal aortic aneurysm

Note: Recommendations are made for men aged 50 years and older with a known positive family history of aortic aneurysm in a first-degree relative, and men aged 65 to 75 years.

INTERVENTIONS AND PRACTICES CONSIDERED

Screening for abdominal aortic aneurysm by ultrasonography

Note: Screening in women was considered but not recommended.

MAJOR OUTCOMES CONSIDERED

- Prevalence of abdominal aortic aneurysm (AAA) in first-degree relatives of index cases diagnosed with an AAA (at least 3 cm or greater)
- Risk associated with having a first-degree relative diagnosed with an AAA (at least 3 cm or greater)
- Mortality from AAA
- All-cause mortality

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Guidelines are developed with the use of an "evidence-based methodology" and involve a systematic literature search, critical appraisal of the research design and statistical results of relevant studies, and grading of the sufficiency (quantity, quality, consistency, and relevancy) of the evidence for drawing conclusions. During the guideline development process, the Guideline Development Team (GDT) reviews evidence published in peer reviewed scientific journals, existing evidence-based guidelines and consensus statements from external professional societies and government health organizations, and clinical expert opinion of Kaiser Permanente regional specialty groups. For details of the literature search, including databases searched and search terms for each clinical question, see the original guideline document.

NUMBER OF SOURCE DOCUMENTS

19

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Refer to the Table "KP System of grading and Strength of a Body of Evidence" in the original guideline document for the system for grading the strength of a body of evidence.

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Each recommendation within a guideline is labeled as "evidence-based" or "consensus-based." A recommendation is considered "evidence-based" if there are a sufficient number of high-quality studies from which to draw a conclusion and the recommended practice is consistent with the findings of the evidence. A recommendation can also be considered "evidence-based" if there is insufficient evidence and no practice is recommended. A recommendation is considered "consensus-based" if there is insufficient evidence and a practice is recommended on the basis of the consensus or expert opinion of the Guideline Development Team.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

To develop the Abdominal Aortic Aneurysm (AAA) Screening Guideline, released in April 2009, a multidisciplinary, interregional Guideline Development Team first met in December 2008 to define the scope of the guideline. The Project Management Team then performed systematic reviews of the medical literature on each of the clinical questions identified by the Guideline Development Team, assembled the evidence, and developed draft recommendations for review by the Guideline Development Team. All of the recommendations and supporting evidence were reviewed in depth by the Guideline Development Team in a series of conference calls from January through March 2009.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Recommendations are classified as either "evidence-based (A-D, I)" or "consensus." Refer to the table below for full definitions.

Label and Language of Recommendations

Recommendation Label	Recommendation Statement*	Evidence Base			
	Evidence-Based Recommendations				
Evidence-based: A	The Guideline Development Team (GDT) strongly recommends the intervention.	The intervention improves important health outcomes, based on good evidence, and the Guideline Development Team (GDT) concludes that benefits substantially outweigh harms and costs.			
Evidence-based: B	The GDT recommends the intervention.	The intervention improves important health outcomes, based on 1) good evidence that benefits outweigh harms and costs; or 2) fair evidence that benefits substantially outweigh harms and costs.			
Evidence-based: C	The GDT makes no recommendation for or against the intervention.	Evidence is sufficient to determine the benefits, harms, and costs of an intervention, and there is at least fair evidence that the intervention improves important health outcomes. But the GDT concludes that the balance of the benefits, harms, and costs is too close to justify a general recommendation.			
Evidence-based: D	The GDT recommends against the intervention.	The GDT found at least fair evidence that the intervention is ineffective, or that harms or costs outweigh benefits.			
Evidence-based: I	The GDT makes no recommendation	Evidence that the intervention is effective is lacking, of poor quality, or			

Recommendation Label	Recommendation Statement*	Evidence Base		
Evidence-Based Recommendations				
	for or against the intervention.	conflicting and the balance of benefits, harms, and costs cannot be determined.		
Consensus-Based Recommendations				
Consensus-Based	The GDT recommends the intervention.	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.		
Consensus-Based	The GDT has determined that the intervention is an option	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.		
Consensus-Based	The GDT recommends against the intervention.	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.		

Note that most consensus-based recommendations will have evidence grade "Insufficient." For the rare consensus-based recommendations which have "Good" or "Fair" evidence, the evidence must support a different recommendation, because if the evidence were good or fair, the recommendation would usually be evidence-based. In this kind of consensus-based recommendation the evidence label should point this out, e.g., "Good, supporting a different recommendation."

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The National Guideline Directors' Guideline Quality Committee reviewed and approved the guidelines in April 2009. All recommendations included in the guideline were approved by the National Guideline Directors.

^{*} All statements specify the population for which the recommendation is intended.

 $^{^{\}dagger}$ At the discretion of the GDT, the recommendation may use the language, "option," but must list all the equivalent options.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Recommendations are identified as either "evidence-based (A-D, I)" or "consensus-based." For definitions of the levels of recommendations, see the end of the "Major Recommendations" field.

Screening for Abdominal Aortic Aneurysm (AAA) by Ultrasonography in the General Population

- **1A** One-time screening for AAA by ultrasonography is recommended in men aged 65 to 75. **Evidence-based: B**
- **1B** It is an option to limit AAA screening to men aged 65 to 75 who have ever smoked. **Consensus-based**
- **1C** Routine screening for AAA in women is not recommended. **Evidence-based: D**

Screening for AAA in Adults with a Family History of AAA

- **2A** For men age 50 and older with a known positive family history of aortic aneurysm in a first-degree relative, AAA screening is recommended. **Evidence-based: B**
- **2B** Â The guideline development team makes no recommendation for or against screening women with a positive family history of AAA. **Evidence-based: I**
- **2C** Systematically collecting information on aortic aneurysm family history is not recommended. **Consensus-based**

Definitions:

Levels of Evidence

Recommendation Label	Recommendation Statement*	Evidence Base		
Evidence-Based Recommendations				
Evidence-based: A	The Guideline Development Team (GDT) strongly recommends the intervention.	The intervention improves important health outcomes, based on good evidence, and the Guideline Development Team (GDT) concludes that benefits substantially outweigh harms and costs.		
Evidence-based: B	The GDT	The intervention improves important		

Recommendation Statement*	Evidence Base			
Evidence-Based Recommendations				
recommends the intervention.	health outcomes, based on 1) good evidence that benefits outweigh harms and costs; or 2) fair evidence that benefits substantially outweigh harms and costs.			
The GDT makes no recommendation for or against the intervention. â□	Evidence is sufficient to determine the benefits, harms, and costs of an intervention, and there is at least fair evidence that the intervention improves important health outcomes. But the GDT concludes that the balance of the benefits, harms, and costs is too close to justify a general recommendation.			
The GDT recommends against the intervention.	The GDT found at least fair evidence that the intervention is ineffective, or that harms or costs outweigh benefits.			
The GDT makes no recommendation for or against the intervention. â□	Evidence that the intervention is effective is lacking, of poor quality, or conflicting and the balance of benefits, harms, and costs cannot be determined.			
Consensus-Based	Recommendations			
The GDT recommends the intervention.	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.			
The GDT has determined that the intervention is an option	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.			
The GDT recommends against the intervention.	The recommendation is based on the consensus of the GDT, typically in the setting of insufficient evidence.			
	The GDT makes no recommends the intervention. The GDT makes no recommendation for or against the intervention. The GDT makes no recommends against the intervention. The GDT makes no recommendation for or against the intervention. Consensus-Based The GDT recommends the intervention. The GDT has determined that the intervention is an option The GDT recommends against the			

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 $^{{}^{*}}$ All statements specify the population for which the recommendation is intended.

 $\hat{a}\Box$ At the discretion of the GDT, the recommendation may use the language, "option," but must list all the equivalent options.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Effective screening of men at risk for abdominal aortic aneurysm (AAA)
- Decreased AAA-specific mortality in men at risk for AAA

POTENTIAL HARMS

There is good evidence of important harms of screening and early treatment, including an increased number of surgeries with associated clinically significant morbidity and mortality, and short-term psychological harms. Based on the moderate magnitude of net benefit, the U.S. Preventive Services Task Force concluded that the benefits of screening for abdominal aortic aneurysm in men aged 65 to 75 who have ever smoked outweigh the harms.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These guidelines are informational only. They are not intended or designed as a substitute for the reasonable exercise of independent clinical judgment by practitioners, considering each patient's needs on an individual basis.
- Guideline recommendations apply to populations of patients. Clinical judgment is necessary to design treatment plans for individual patients.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Kaiser Permanente Care Management Institute. Abdominal aortic aneurysm (AAA) screening clinical practice guideline. Oakland (CA): Kaiser Permanente Care Management Institute; 2009 Apr. 37 p. [29 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2009 Apr

GUIDELINE DEVELOPER(S)

Kaiser Permanente Care Management Institute - Managed Care Organization

SOURCE(S) OF FUNDING

Kaiser Permanente Care Management Institute

GUIDELINE COMMITTEE

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Kaiser Permanente AAA Screening Guidelines Development Team

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: None available

Print copies: Available from the Kaiser Permanente Care Management Institute, One Kaiser Plaza, 16th Floor, Oakland, CA 94612

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on November 24, 2009.

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For any questions regarding the content of Kaiser Permanente National Clinical Practice Guidelines, please contact Denise Myers, RN MPH, Manager, CMI at gladys.i.tom@kp.org or (510) 271-2620.

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